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The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WESLEY J. BRUXVOORT,
STEVEN J. KEIPERT, FRED B. McCORMICK,
JERRY W. WILLIAMS and BRADFORD B. WRIGHT

Appeal No. 95-1622
Application 07/890,593[1]

ON BRIEF

Before JOHN D. SMITH, WEIFFENBACH and WARREN, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner finally rejecting claims 2 through 25.[2] Claim 2 is illustrative of the claims on appeal

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[1] Application for patent filed May 21, 1992. The real party in interest appears to be Minnesota Mining and Manufacturing Co.

[2] We observe that appealed claim 3 has been clerically deleted from the application. This appears to have occurred upon the clerical entry of the amendment of March 11, 1994 (Paper No. 7) which canceled original claim 1 and amended original claim 2 but which contained no direction to cancel

2. An energy sensitive article comprising:

(a) a substrate having basic reactive sites; and

(b) an energy sensitive organometallic compound having at least one organometallic group coated on at least a portion of at least one surface of the substrate, wherein the organometallic compound is essentially free of reactive nucleophilic groups and is chemically bonded through the organometallic group of the organometallic compound to the basic reactive sites on the substrate.

The appealed claims[3] as represented by claim 2[4] are drawn to an article wherein an energy sensitive organometallic compound, which is essentially free of reactive nucleophilic groups and has been coated on at least a portion of at least one surface of a substrate having basic reactive sites, is chemically bonded through at least one organometallic group to the reactive sites on that substrate. The article of appealed claim 2 can be prepared by coating an energy sensitive organometallic compound that is essentially free of reactive nucleophilic groups on at least a portion of a substrate having basic reactive sites and exposing the coating to energy to effect the chemical bonding of the organometallic compound to the basic reactive sites of the substrate as set forth in appealed claim 24. According to appellants, the claimed articles are useful, *inter alia*, as protective coatings, adhesive primers, printing plates, durable release agents and abrasive articles (specification, pages 20 and 50).

The references relied on by the examiner are:

Wright[5]	4,503,140	Mar. 5, 1985
Palazzotto et al. (Palazzotto)	4,985,340	Jan. 15, 1991

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original claim 3. Since we have found no amendment canceling original claim 3, this claim is properly before us on appeal.

[3] Error appears in appealed claims 6 and 21 as copied in the appendix to appellants' principal brief. Appealed claim 6 recites "lasses" rather than "glasses" in the second line thereof. Appealed claim 21 as it stands of record reads in part "coated and and [sic] chemically bonded" and the second "and" does not appear in the copy of this claim in the appendix.

[4] Appellants state in their principal brief (page 8) that the "rejected claims do not stand or fall together. Each claim stands or falls alone." The examiner submits that appellants have not separately argued each of the appealed claims (answer, page 2) and appellants did not traverse the examiner's position in their reply brief. Accordingly, we have decided this appeal based on appealed claim 2, with respect to all of the grounds of rejection involving this claim, appealed claims 15 and 16, with respect to the ground of rejection specifically involving these two claims, and appealed claim 24, with respect to the ground of rejection of appealed claims 24 and 25. 37 CFR § 1.192(c)(5) and (6)(1993).

[5] Wright and the application on appeal appear to be commonly assigned (*see supra* note 1).

David C. Bailey and Stanley H. Langer, "Immobilized Transition-Metal Carbonyls and Related Catalysts," 81 *Chemical Reviews*, no. 2, 109-111, 116-123, 132-145 (April 1981). [6] (Bailey)

Printed Circuits Handbook, 11.25-29 (Clyde F. Coombs, Jr., ed., 3d ed., New York, McGraw-Hill Book Company, 1989).

The examiner has maintained the following grounds of rejection on appeal:

appealed claims 15 and 16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention;

appealed claims 2-25 are rejected under 35 U.S.C. § 112, first paragraph, as the disclosure is enabling only for claims limited to specific substrates and organometallic compounds known to be operable with the present invention;

appealed claims 2 through 14, 16 and 18 through 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wright;

appealed claims 2 through 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Wright further in view of Palazzotto;

appealed claims 2 through 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Wright further in view of Palazzotto as described above, further in view of Bailey;

appealed claims 24 and 25 are rejected under 35 U.S.C. § 103 as being unpatentable over *Printed Circuits Handbook* further in view of Wright; and

appealed claims 2 through 14, 16 and 18 through 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bailey.

We affirm the ground of rejection under 35 U.S.C. § 102(b) or § 103 based on Wright and the ground of rejection under 35 U.S.C. § 102(b) based on Bailey but reverse all of the remaining grounds of rejection. Under the provisions of 37 CFR § 1.196(b) (December 1997), we enter a new ground of rejection of appealed claims 24 and 25 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, 35 U.S.C. § 103 as being unpatentable over Wright.

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[6] We have cited and considered *only* the pages of Bailey that the examiner made of record in the Form PTO-892 attached to the Office action of November 2, 1993 (Paper No. 5) which is less than the "pp. 110-145" or the "entire article" now relied on by the examiner in the answer (pages 2 and 4). Indeed, the record contains a copy of only pages 109-111, 116-123, 132-145 of Bailey and we consider the examiner's reliance on the "entire article" in the ground of rejection under § 112, first paragraph, to refer to the Bailey to the extent that is has been made of record..

Rather than reiterate the respective positions advanced by the examiner and appellants, we refer to the examiner's answer and to appellants' principal and reply briefs for a complete exposition thereof.

Opinion

We begin our consideration of the grounds of rejection by determining the scope of appealed claims 2 and 24. It is well settled that the terms of a claim must be given the broadest reasonable interpretation consistent with appellants' specification as it would be interpreted by one of ordinary skill in this art. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319**,** 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). In doing so, the terms in the appealed claims must be given their ordinary meaning unless another meaning is intended by appellants. *See, e.g., Morris*, 127 F.3d at 1055-56, 44 USPQ2d at 1029 ("It is the applicants' burden to precisely define the invention, not the PTO's. See 35 U.S.C. § 112 ¶ 2 [statute omitted]."); *York Prods., Inc. v. Central Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572-73, 40 USPQ2d 1619, 1622 (Fed. Cir. 1996), and cases cited therein (a claim term will be given its ordinary meaning unless appellant discloses a novel use of that term); *Zletz, supra* ("During patent prosecution the pending claims must be interpreted as broadly as their terms reasonably allow. When the applicant states the meaning that the claim terms are intended to have, the claims are examined with that meaning, in order to achieve a complete exploration of the applicant's invention and its relation to the prior art."). However, while we refer to the specification to determine the meaning of a particular word or phrase recited in a claim, we will not read into the claim limitations that are found only in the specification. *In re Priest*, 582 F.2d 33, 37, 199 USPQ 11, 15 (CCPA 1978), citing *In re Prater*, 415 F.2d 1393, 1405, 162 USPQ 541, 551 (CCPA 1969) ("We have consistently held that no 'applicant should have limitations of the specification read into a claim where no express statement of the limitation is included in the claim.'"); *see also E.I. du Pont de Nemours v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433, 7 USPQ2d 1129, 1131 (Fed. Cir. 1988).

We construe appealed claim 2 to require that the claimed article[7] comprises at least one organometallic moiety that is chemically bonded through at least one organometallic group thereof to at least one site on a substrate, wherein the organometallic moiety is derived by exposing to energy an energy sensitive organometallic compound that is essentially free of reactive nucleophilic groups and the site on the substrate to which the organometallic moiety is chemically bonded was a basic reactive site. *Exxon Chemical Patents Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555, 35 USPQ2d 1801, 1802 (Fed. Cir. 1995) ("The claimed composition is defined as comprising - meaning containing at least - five specific ingredients."). We construe appealed claim 24 as encompassing a process for preparing an article of appealed claim 2 since the same limitations appear therein. Appellants in their specification (page 6) have specifically defined an "ogranometallic compound" as

> a monomeric organometallic complex or a homopolymer or copolymer comprising at least one energy sensitive organometallic group [sic, that] is incorporated in or appended to the backbone of the polymer,

an "organometallic group" as

> a chemical substance in which at least one carbon of an organic moiety is bonded to a transition metal atom,

and "energy sensitive" as

> able to undergo chemical reaction or transformation upon exposure to electromagnetic radiation . . . , accelerated particles . . . , and thermal . . . energy.

Thus, as specifically defined by appellants, the energy sensitive organometallic compound can be any monomer or polymer containing an organic moiety having a transition metal atom bonded to a carbon thereof, which is able to undergo chemical reaction or transformation upon exposure to

[7] Appealed claim 2, appealed claims dependent thereon, and appealed claims 24 and 25 contain the term "energy sensitive article" in the preamble thereof. We do not consider this term to constitute a limitation in the appealed claims because the energy sensitivity of the organometallic group of the organometallic compound coated on the substrate would be dissipated upon exposure thereof to energy which results in the chemical bonding of the organometallic compound to the substrate through the organometallic group as required in the last clause of claims 2 and 24. *See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989); *In re Stencel*, 828 F.2d 751, 754-55, 4 USPQ2d 1071, 1073 (Fed. Cir. 1987).

energy and which is essentially free of reactive nucleophilic groups. With respect to the latter limitation, appellants have specified the definition of the term "nucleophilic group" (specification, page 6). While appellants have provided no examples of the nucleophilic groups falling within this definition in their specification, we observe that Wright discloses "suitable nucleophiles" using the same definition (col. 6, lines 62-66; compare col. 2, lines 60-63).

Appellants have not, however, specifically defined the extent to which the phrase "essentially free" limits the presence of nucleophilic groups on the organometallic compound. The term "essentially free" is a term of degree for which the specification must provide a definition or some standard of measurement, in the absence of which the appealed claims would be indefinite. *See In re Marosi*, 710 F.2d 799, 802-03, 218 USPQ 289, 292 (Fed. Cir. 1983); *see also Seattle Box Co., Inc. v. Industrial Crating & Packing Inc.*, 731 F.2d 818, 826, 221 USPQ 568, 573-74 (Fed. Cir. 1984). We observe that appellants have stated that "[a] feature of the invention is the lack of reliance on nucleophilic crosslinking of the energy sensitive polymer films to produce adherent coatings" and the "coating does not rely on crosslinking of the polymeric coating to generate adhesive forces" (specification, page 5, lines 24-26, and page 8, lines 3-4). Based on this disclosure, we conclude that the standard of measurement by which to determine whether the extent of the presence of nucleophilic groups on the energy sensitive organometallic compound *per se* exceeds the limitation "*essentially* free of reactive nucleophilic groups" is whether the *reactive* nucleophilic groups present on the energy sensitive organometallic compound *per se* must be relied on to crosslink the organometallic moieties on the substrate in order to produce coatings adherent to the substrate.

However, we do not construe the limitation placed on the nucleophilic groups that can be present on the organometallic compound *per se* as limiting the presence of nucleophilic groups on other ingredients that can be present in any coating applied to the substrate and subsequently chemically bonded thereto in either appealed claim 2 or appealed claim 24. Indeed, the transitional term "comprising" in the preamble of these appealed claims permits the article claimed and prepared to include additional materials which can materially affect the basic and novel characteristics thereof, including monomers and polymers substituted by nucleophilic groups following within appellants' definition of this term. *In re Baxter*, 656 F.2d 679, 686-87, 210 USPQ 795, 802-03 (CCPA 1981)

("As long as one of the monomers in the reaction is propylene, any other monomer may be present, because the term 'comprises' permits the *inclusion* of other steps, elements, or materials.").

The sole limitation set forth in appealed claims 2 and 24 with respect to the substrate for the claimed article is that the substrate must have basic reactive sites. A "basic reactive site" is defined by appellants as "an exposed site on a substrate surface having basic functionality . . . " (specification, page 6). The type of chemical bond formed between the organometallic group of the organometallic compound and the basic reactive site on the substrate, such that the organometallic compound is "chemically bonded *through* the organometallic group . . . *to* the basic reactive site" (emphasis ours), is not specified in appealed claim 2, and is not specifically defined by appellants in their specification. *York Prod., supra*. While appellants' specification sets forth that the organometallic compound "upon exposure to energy, bonds to basic reactive sites on a substituent via the metal center" of the organometallic group, wherein the exposure of energy results in the loss of one or more legends and thus in a "coordinatively unsaturated organometallic group" (specification, page 4, lines 4-5 and 10-12), appellants also suggest the "covalent bonding of a transition metal organometallic group to the substrate" (specification, page 5, line 31, to page 6, line 2). Indeed, an appropriately functionalized organometallic group can bond to basic reactive sites on substrates through covalent bonding without the participation of the metal center thereof. In this respect, we find no requirement in appealed claim 2 that the chemical bond must be formed by exposing the energy sensitive organometallic compound coated on the basic reactive site containing substrate to energy and indeed the combined definitions in appellants' specification for the terms "organometallic compound" and "energy sensitive" require only that the organometallic compound must be "*able* to undergo chemical reaction or transformation" (emphasis ours), not that it must do so. We further find that appealed claim 24 does not specify any particular moiety on the energy sensitive organometallic compound through which the resulting organometallic moiety must be chemically bonded to the substrate.

Upon consideration of appealed claim 2 and the terms thereof, as we have construed them above, with respect to the ground of rejection under § 112, first paragraph, enablement, we are in agreement with appellants (principal brief, pages 10-11; reply brief, pages 1-2), that the examiner (answer, pages 3-4 and 10) has failed to carry the burden of providing a reasonable explanation,

supported by the record as a whole, even with careful consideration of Bailey, why the assertions as to the scope of objective enablement set forth in the specification with respect to the claimed articles and the claimed methods of preparing the same as specified in the full breadth of all of the appealed claims is in doubt, including reasons why the description of the invention in the specification would not have enabled one of ordinary skill in this art to practice the claimed invention without undue experimentation. *In re Strahilevitz*, 668 F.2d 1229, 1232, 212 USPQ 561, 563 (CCPA 1982); *In re Geerdes*, 491 F.2d 1260, 1264, 180 USPQ 789, 793 (CCPA 1974); *In re Marzocchi*, 439 F.2d 220, 223-24, 169 USPQ 367, 369-70 (CCPA 1971). Accordingly, we reverse this ground of rejection.

We have also carefully considered the ground of rejection of appealed claims 15 and 16 under § 112, second paragraph, and contrary to the position of the examiner (answer, pages 3 and 9-10), we agree with appellants (principal brief, pages 9-10) that the language of these claims as a whole as well as in view of the specification in fact sets out and circumscribes the organometallic copolymer products in terms of the starting materials with a reasonable degree of precision and particularity as required by the statute. *In re Moore*, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). The fact that the starting materials may be broadly defined is not *per se* indefiniteness. *See generally In re Gardner*, 427 F.2d 786, 787-88, 166 USPQ 138, 139-40 (CCPA 1970). Accordingly, we reverse this ground of rejection.

We now turn to the grounds of rejection based on prior art with which we have compared the claimed invention defined by appealed claims 2 and 24 as we have construed these claims above. Upon carefully considering the teachings of Wright, we must agree with the examiner (answer, pages 4-6 and 11-13) that appealed claim 2 is anticipated under § 102(b) or obvious under § 103 over this reference. We find that in Embodiment II (e.g., col. 2, lines 32-36; col. 3, lines 37-40, col. 4, lines 26-61, col. 5, lines 51-59, col. 11, lines 24-35, and Wright Examples 13-21), Wright teaches that a coating of a copolymeric organometallic compound containing an energy sensitive organometallic group and a polynucleophilic compound is applied to substrates having basic reactive sites (e.g., col. 11, lines 5-15) and the coated substrate is exposed to radiation energy to form an adherent coating on the substrate (e.g., col. 10, line 59, to col. 11, line 44). Indeed, in Wright Examples 13 and 18, for example, an organometallic copolymer of 1-vinyl-2-(and –3-

)methylcyclopentandienyltricarbonylmanganese and either styrene (Wright Example 13) or methyl methacrylate (Wright Example 18) having an energy sensitive organometallic group which is free of nucleophilic groups and a polynucleophilic compound which is pyrazine (Wright Example 13) or 1,2-bis(diphenylphosphino)ethane (Wright Example 18) is coated onto at least a portion of one side of a 75 µm film, that we presume to be a metallized or primed film which would have basic reactive sites,[8] and irradiated to adhere the coating to the substrate.

Accordingly, it appears from this evidence that Wright Examples 13 and 18 satisfy all of the limitations of appealed claim 2 even though Wright is silent with respect to whether the organometallic copolymer is chemically bonded through the energy sensitive organometallic group to the basic reactive site on the polyester film. However, we find that while Wright does not use the term "chemically bonded" employed by appellants in appealed claim 2, the reference does use the terms "adherent" (e.g., col. 10, line 60) and "adhesion" (e.g., col. 11, line 21) to describe coatings that "become crosslinked and bound to the substrate" when exposed to radiation energy (col. 11, lines 50-51) in the same manner as appellants in their specification (e.g., page 4, lines 13 and 19-20). For example, in Wright Example 18, the coated film was disclosed to have "extremely good adhesion" (col. 17, line 14). Indeed, because both appealed claim 2 and Wright use the identical or substantially identical organometallic copolymers containing energy sensitive organometallic groups and polynucleophiles to coat at least a portion of one side of an identical or substantial identical substrate having basic reactive sites and use the identical or substantially identical process of exposing the coating to radiation energy to obtain an adherent coating on the substrate, the claimed articles and those prepared in Wright are necessarily or inherently identical or substantially identical. Furthermore, we observe here that upon exposure of the coating to radiation energy, the polynucleophilic compound can react with the organometallic groups on the organometallic copolymer such that a reactive nucleophilic site may or may not remain on a crosslinked organometallic copolymer which also contains at least one energy sensitive

[8] We note that the substrate in Wright Example 6 is "[v]apor coated aluminum on 75 µm polyester film" which appears to be referred to in, e.g., Wright Examples 7, 10 and 22 as a "primed polyester (75 µm)" and otherwise as, for example, "polyester" or "75 µm polyester" as in, e.g., Wright Examples 9, 11-14, 17 and 18.

organometallic group. While this result can occur with Wright Examples 13 where the theoretical ratio of the organometallic groups on the organometallic polymer to the nucleophilic groups on the polynucleophilic compounds is 1:6.4 , it would reasonably be expected to be particularly the case in Wright Example 18, where the ratio is 1:0.52.[9] We are of the opinion that either of these crosslinked copolymers, as well as the crosslinked copolymers of Wright Examples 14-17 and 19-21 would satisfy the limitation in claim 2 that the organometallic compound must be *essentially* free of nucleophilic groups as we have construed this limitation above. *Compare Exxon Chemical Patents*, 64 F.3d at 1555-58, 35 USPQ2d at 1802-05 ("Consequently, as properly construed, Exxon's claims are to a composition that contains the specified ingredients at any time from the moment at which the ingredients are mixed together."). We further find that Wright (e.g., col. 5, lines 51-59) would have reasonable suggested to one of ordinary skill in this art that the Wright Examples can be modified by using 95 percent by weight of an organometallic copolymer prepared from 60 mol percent of organometallic monomers and 5 percent by weight of a polynucleophile, which would provide a coating having a substantially higher ratio of energy sensitive organometallic groups to nucleophilic groups, and thus a greater concentration of energy sensitive organometallic groups that would not be involved in the crosslinking reaction, with the reasonable expectation of obtaining an adherent coating upon exposure to energy.

In similar manner, Wright discloses with respect to Embodiment III (e.g., col. 2, lines 37-39; col. 3, lines 40 -42, col. 4, lines 62-68, col. 5, line 61, to col. 6, line 2, col. 11, lines 5-15, and Wright Example 22), that the substrate having basic reactive sites is coated with an organometallic copolymer *and* a copolymer having reactive nucleophilic groups such that these teachings would apply to appealed claim 2 under § 102(b) and § 103 in the same manner that we set forth above with respect to Wright Embodiment II. Indeed, in Wright Example 22, an organometallic copolymer having an energy sensitive organometallic group which is free of nucleophilic groups and a copolymer having reactive nucleophilic groups is coated onto at least a portion of one side of a "primed

[9] The ratio of the organometallic groups on the organometallic polymer to the nucleophilic groups on the polynucleophilic compounds of the Wright Examples has been calculated by declarant McCormick in his declaration (¶ 24; *see infra* note 10), which we further discuss below.

polyester" which would have basic reactive sites (*see supra* note 8), and exposed to radiation energy to adhere the coating to the substrate, such that the claimed article and that prepared in Wright Example 22 are necessarily or inherently, identical or substantially identical. Wright (e.g., col. 5, line 61, to col. 6, line 2) would also have reasonably suggested to one of ordinary skill in this art that this example can be modified to provide a coating having a substantially higher ratio of energy sensitive organometallic groups to nucleophilic groups, and thus a greater concentration of energy sensitive organometallic groups that would not be involved in the crosslinking reaction, with the reasonable expectation of obtaining an adherent coating upon exposure to energy.

Wright further discloses Embodiment I (e.g., col. 2, lines 27-31; col. 3, lines 33-36, col. 3, line 45, to col. 4, line 25, col. 5, lines 43-50, col. 11, lines 5-15, and Wright Examples 1-12) wherein a coating of copolymers formed from a monomeric organometallic compound containing an energy sensitive organometallic group, a monomeric compound containing reactive nucleophilic groups and, optionally, a monomeric compound that does not contain either of the reactive groups, is applied to at least a portion of one surface of a substrates having basic reactive sites and the copolymer coated substrate is exposed to radiation energy to form an adherent coating on the substrate. While the overall process is similar to Embodiments II and III, it does differ in that the copolymers coated on the substrate contain energy sensitive organometallic groups *and* reactive nucleophilic groups, and upon exposure to energy, the organometallic groups react with the reactive nucleophilic groups that are present on the same or different copolymer (col. 3, line 45, to col. 4, line 25). Thus, in comparing appealed claim 2 and Wright Embodiment I, the issue that arises is whether these copolymers that are coated on the substrate are essentially free of reactive nucleophilic groups as we have construed this limitation above. With respect to Wright Examples 1-12, we cannot determine whether the claimed articles and those prepared in these examples are identical or substantially identical from the information provided by Wright. We do observe here, as we did above, that upon exposure of the copolymers coating to radiation energy, the reactive nucleophilic groups will react with the organometallic groups such that a reactive nucleophilic site can remains on the crosslinked copolymer which also contains at least one energy sensitive organometallic group, in similar manner to Wright Embodiments II and III, and thus we are again of the opinion that such a crosslinked copolymer would satisfy the limitation in

claim 2 that the organometallic compound must be *essentially* free of nucleophilic groups as we have construed this limitation above. *Compare Exxon Chemical Patents, supra*. We further find in this respect, as we also did above, that Wright (e.g., col. 5, lines 43-50) would also have reasonably suggested to one of ordinary skill in this art that the Wright Examples 1-12 can be modified to provide coatings having a substantially higher ratio of energy sensitive organometallic groups to nucleophilic groups, and thus a greater concentration of energy sensitive organometallic groups that would not be involved in the crosslinking reaction, with the reasonable expectation of obtaining an adherent coating upon exposure to energy.

We have not applied Wright Embodiment IV to appealed claim 2 because the organometallic complex used to crosslink the nucleophilic group containing polymer in this Embodiment is not a monomer (e.g., col. 2, lines 42-43, col. 3, lines 44-46, col. 5, lines 1-39, and Wright Examples 23-25).

Accordingly, it reasonably appears to us that the articles of appealed claim 2 are necessarily or inherently identical or substantially identical to the articles disclosed by Wright and that one of ordinary skill in this art would have further modified the Wright Examples to obtain coatings with a higher ratio of energy sensitive organometallic groups to nucleophilic groups with the reasonable expectation of obtaining an adherent coating upon exposure to energy. Thus, the burden falls upon appellants to establish by effective argument and/or objective evidence that the claimed invention patentably distinguishes over this reference, whether the rejection is considered to be based on § 102(b) or § 103. *In re Spada*, 911 F.2d 705, 708-09, 15 USPQ2d 1655, 1657-58 (Fed. Cir. 1990); *In re Best*, 562 F.2d 1252, 1255-56, 195 USPQ 430, 433-34 (CCPA 1977).

We have carefully considered all of appellants' arguments (principal brief, pages 11-13 and 17; reply brief, pages 3-6) and the evidence presented in the McCormick declaration[10] in light of appellants' arguments. We are not convinced by appellants' arguments that appealed claim 2 patentably distinguishes over Wright. While appellants contend that "all of the compositions of Wright *must* contain reactive nucleophilic groups" (principal brief, page 17) and thus the "*compositions of the present invention and those of Wright are different, including the starting materials*" (reply brief,

[10] The McCormick declaration was submitted on March 11, 1994 (Paper No. 7).

page 6), the only coated substrates disclosed in Wright which contain a copolymer having both reactive nucleophilic groups and energy sensitive organometallic groups are those of Wright Embodiment I. As we discussed above, we cannot determine whether the articles of Wright Examples 1-12 are identical or substantially identical to the articles of appealed claim 2, but we do find that one of ordinary skill in this art would have modified the copolymers in these examples such that the ratio of energy sensitive organometallic groups to reactive nucleophilic groups would be higher and thus there would be a greater concentration of energy sensitive organometallic groups that would not be involved in the crosslinking reaction. In any event, the crosslinking of the copolymer upon exposure to radiation energy would inactivate the nucleophilic groups as we discussed above.

Thus, the principal issue remains as to whether the claimed and Wright articles are necessarily or inherently, identical or substantially identical or whether the modification of the Wright Examples as taught in that reference was within the ordinary skill in this art. We have carefully considered the McCormick declaration but fail to find therein objective evidence that patentably distinguishes the claimed invention over Wright under either § 102(b) or § 103. We find that declaration Example A (¶ 12) does not provide a side-by-side comparison of a claimed article with an article prepared according to Wright Examples 1, 2 and 9, which Wright Examples fall within Wright Embodiment I. As we discussed above, in Embodiment I and in these Wright Examples, the coating applied to at least a portion of one surface of the substrate having basic reactive groups is a copolymer prepared from at least organometallic group containing monomers *and* nucleophilic group containing monomers. Thus, declaration

Example A differs from these teachings of Wright in three significant respects: (1) the "[s]olutions 1-3" serving as "models for Wright's Examples" contain the nucleophilic "4-t-butylpyridine" (¶ 12), which is a *non*-monomeric mononucleophilic compound, rather than the monomeric mononucleophilic "4-vinylpyridine" (e.g., Wright Example 1); (2) the compound "$MeCpMn(CO)_3$" used in these solutions (¶¶ 11 and 12) appears to be methylcyclopentandienyl manganese tricarbonyl which is also a non-

monomer;[11] and (3) the coating applied to the substrate in declaration Example A with respect to "[s]olutions 1-3" thus comprises two *non*-monomeric components and *not* a copolymer or terpolymer as taught in Wright for Embodiment I and as used in the Wright Examples represented here. We further observe that in Wright Examples 1, 2 and 9, a solution of the copolymer or terpolymer in tetahydrofuran was coated onto the substrate and dried prior to exposure to radiation energy while in declaration Example A, the solution consisting of the monomeric organometallic complex and the non-monomeric mononucleophilic compound is coated onto the substrate and immediately exposed. The "solutions 4-6" stated to "serve as models" of the claimed invention (¶ 13) also employ the *non*-monomeric compound "$MeCpMn(CO)_3$" and thus are *not* representative of appealed claim 2 in this respect because this claim, as we have construed it above, requires that the ogranometallic compound must be either monomeric or polymeric. We also find that solvent ?-butyrolactone employed in "solutions 4-6" is stated to be an "inert diluent" (¶ 13).

We find that declarant McCormick states that solutions 1-3 of declaration Example A "serve as models" of the molar ratios of energy sensitive organometallic groups to reactive nucleophilic groups found in the identified Wright Examples 1, 2 and 9 (¶ 12). With respect to the results in this Example, declarant McCormick states that the "marks" resulting from the exposure of the coatings obtained with Wright solutions 1-3 at the smallest exposure period were "*seen* to dissolve and wash off the [substrate] during solvent rinse," which qualitative result "was consistent with formation of $MeCpMn(CO)_2$/(4-t-butylpyridine) which is *analogous* to the chemistry *described* by Wright to account for his observed crosslinking" (¶ 15; emphasis ours). We fail to find any statement or evidence indicating that *none* of the non-monomeric ogranometallic complexes of solutions 1-3 had chemically bonded to the substrate at this level of exposure. However, declarant McCormick states that as the exposure periods increased, "faint marks from solutions 1-3 could be discerned" which were not as pronounced as "the marks from corresponding solutions 4-6" (¶ 16). We find these reported qualitative results to be evidence of chemical bonding of the organometallic compound to the basic reactive site containing substrate in solutions stated to be "analogous to the chemistry described by Wright" and, indeed, Wright

[11] Compare the monomeric vinyl(methyl)cyclopentandienyl manganese tricarbonyl used in declaration

discloses that increasing the time of exposure will increase the extent to which the reaction occurs (col. 11, lines 30-33).

Declarant McCormick states that the qualitative results "[demonstrate] that the inclusion of nucleophilic groups (as in Wright) *interferes with or precludes bonding* of photogenerated '$CpMn(CO)_2$' species with basic sites on the substrate, as in the present invention" (¶17; emphasis ours). We must agree with declarant McCormick that based on the results with solutions 1-3, it is apparent that the presence of the non-monomeric nucleophilic compound *interferes* with the bonding of the non-monomeric organometallic complex to the basic reactive sites on the substrate at the stated molar ratios of energy sensitive organometallic to reactive nucleophilic groups, but the extent of interference appears to be a function of the period of exposure to the radiation, which is consistent with the teachings of Wright as we noted above. However, we find no statement or evidence with respect to declaration Example A which supports the conclusion that the presence of the non-monomeric nucleophilic groups *precludes* the bonding of the non-monomeric organometallic compound with the substrate even at the stated molar ratios of energy sensitive organometallic to reactive nucleophilic groups for any of the exposure periods.

We find that declaration Example B (¶ 19) also does not provide a side-by-side comparison of a claimed article with an article prepared according to "Wright Examples 10-12 (embodiment I), 13, 14 and 17 (embodiment II) , and 22 (embodiment III)," which Wright Embodiments we have discussed above. While declaration Example B does employ a copolymer of vinyl(methyl)cyclopentandienyl manganese tricarbonyl and styrene in methyl ethyl ketone as "solution 1" representing Wright (¶ 19), this "solution" differs significantly from each of the exemplified Wright Embodiments because it contains "4-t-butylpyridine" which as we explained above is a *non*-monomeric *mono*nucleophilic compound. Thus, "solution 1" is not representative of Wright Embodiments I through III because (1) in Wright Embodiment I, the copolymer contains *both* nucleophilic groups and energy sensitive organometallic groups; (2) in Wright Embodiment III, one of the two copolymers contains *only* nucleophilic groups while the other copolymer contains *only* energy sensitive organometallic groups; and (3) in Wright

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Example B to prepare a copolymer (¶ 19).

Embodiment II, a copolymer containing *only* energy sensitive organometallic groups is employed with a *poly*nucleophilic compound. We further find that "solution 1" is also not representative of the identified Wright Examples in other respects. With respect to the copolymer employed, a copolymer based on these two components is found only in Examples 13, 14 and 22, while the organometallic monomer, including the transition metal, is distinctly different in Wright Examples 10-12 ((2-phenylethylacrylate)tricarbonyl-chromium, molybdenum or tungsten) as is the copolymer of Wright Example 17 (styrenetricarbonylchromium and styrene). In Wright Example 12, the monomeric mononucleophilic group is 2-aminoethylacrylate while in Wright Examples 13, 14 and 17 the polynucleophilic compound is pyrazine. The solvent from which the coating is applied also differs in that instead of methyl ethyl ketone, the solvent mixture tetrahydrofuran and methanol is used in Wright Examples 10 and 11 while ethyl acetate is used as the solvent in Wright Examples 12-14, 17 and 22. We also find that solvent ?-butyrolactone employed is used in "solution 2" as an inert diluent in order to "match the mol% concentration of manganese species in the two solutions" (¶ 20).

We find that declarant McCormick states that solution 1 of declaration Example B is "representative" (¶ 19) of the molar ratio of energy sensitive organometallic to reactive nucleophilic groups found in Wright Examples 10-14, 17 and 22 (¶ 19), and further states that "[i]n this example, the chemical reactions occurring in the polymer of solution 1 are *essentially identical* to those *described* in Wright, where $CpMn(CO)_2$/N species are formed, but these *do not provide crosslinks in this example*" (¶ 22; emphasis ours; see also ¶ 20). With respect to the results in declaration Example B, declarant McCormick reports that the irradiated "polymer from solution 1 immediately dissolved and was removed from the panel while the polymer from solution 2 adhered to" the aluminum Q-panel (¶ 20) and that "results were essentially identical" when the same solutions were applied to and irradiated on silicated aluminum (¶ 21). We find that these qualitative results were obtained by irradiating the treated panels with "*two 15 W* fluorescent blacklights (366 nm), which were 1 inch distant from" the panels for a period of two minutes (¶ 20, which refers to ¶ 14; emphasis ours).

We fail to find any statement or evidence in the McCormick declaration indicating that organometallic polymers of solution 1 did not chemically bond to either substrate at this single level of irradiation. Indeed, we observe here that the qualitative results reported for the Wright solutions in

declaration Example A show that the extent of chemical bonding between the organometallic copolymer increases as the period of exposure increases. In this respect, we have compare the irradiation source used in declaration Example B with the teachings of Wright. The solution of the organometallic polymer and the mononucleophilic 4-t-butylpyridine most closely resembles Wright Embodiment II which requires a polynucleophilic compound, such as pyrazine. Wright teaches that the exposure of such Embodiment II compositions can be from "less than one minute . . . to five minutes or more" (col. 11, lines 31-33) and exemplifies "irradiation from a *400 W* mercury lamp . . . at a distance of 30 cm." for a period of "*ten* minutes" for (e.g., Wright Example 13, col. 15, lines 39-42; emphasis ours). In comparison, where the nucleophilic groups are present on the organometallic polymer in Wright Embodiment I and on a separate polymer in Wright Embodiment III, the exemplified irradiation periods with the same radiation source are 1 minute and 5 minutes, respectively (see, e.g., Wright Examples 1 and 22; see also col. 11, lines 36-44). Thus, the Wright Examples represented in declaration Example B utilize a higher intensity irradiation source and, with respect to Wright Examples 13, 14, 17 and 22, for a period greater than in this declaration Example. We find no evidence or statement indicating that the organometallic polymers of Wright solution 1 would *not* chemically bond to either substrate at any level of exposure taught in Wright, which levels of irradiation are indeed greater at least in intensity if not also in period than used in declaration Example B.

Declarant McCormick states the evidence with respect to solution 1 shows that the "nucleophilic groups of Wright *interfere with or preclude bonding* of photogenerated '$CpMn(CO)_2$' species with basic sites on the substrate" (¶22; emphasis ours). We agree with declarant McCormick to the extent that the reported qualitative results with solution 1 indicate that the presence of the non-monomeric nucleophilic compound *interferes* with the bonding of the organometallic coploymer to the basic reactive sites on the substrate at the stated molar ratios of energy sensitive organometallic groups to reactive nucleophilic groups under the irradiation conditions stated in the declaration. However, we find no statement or evidence with respect to declaration Example B which supports the conclusion that the presence of the non-monomeric nucleophilic groups *precludes* the bonding of the organometallic copolymer with the substrate even at the stated molar ratios of energy sensitive organometallic groups to reactive nucleophilic groups and the irradiation conditions employed in Wright.

We find that declarant McCormick further states the ratios of molar equivalents of organometallic groups to nucleophilic groups for all of the Wright Examples (¶ 24), and states the descriptions of the "adhesion" set forth in certain of these Examples (¶ 25). Declarant Wright concludes that "[t]hese variable [descriptive] results *do not seem to correlate* with metal/nucleophilic ratios . . . [and] [i]f Wright's compositions adhered by our mechanism the results . . . *should be more consistent* in providing good adhesion" (¶ 26; emphasis ours). We find that declarant McCormick's conclusions are, in this instance, based on subjective rather than objective evidence.

Declarant McCormick does conclude that "example 18 of Wright is the *only* example that does not use an excess of nucleophile and it was coated on polyester which would not be one or our useful substrates" (¶ 25). The molar ratio of organometallic groups to nucleophilic groups in Wright Example 18 is stated to be "1/0.52" (¶ 24) and while not included in the list of adhesion descriptions attributed to Wright (¶ 25), we find that Wright describes the result of irradiating the dried coating of organometallic polymer and the polynucleophilic 1,2-bis(diphenylphosphino)-ethane on "75 µm polyester film" as "extremely good adhesion" (col. 17, lines 4-15). We cannot agree with declarant McCormick that the polyester substrate used in Wright Example 18 is excluded by appealed claim 2 or not disclosed in appellants' specification. Indeed, as we found above (*see supra* note 8), it appears that the "75 µm polyester film" is "primed" with "[v]apor coated aluminum" which, of course, would provide basic reactive sites as required by appealed claim 2 and as disclosed in appellants' specification (page 19, lines 3-4 and 11). We further find no reasonable basis to exclude Wright Example 18 from consideration based on the "polyester" substrate since that *same* substrate is included in Wright Examples 9, 11-14 and 17 which are stated to be represented by solution 1 in declaration Example B (¶ 19).

It is well settled that the burden of establishing the significance of data in the record, with respect to unexpected results or for other purposes, rests with appellants, which burden is not carried by mere arguments of counsel or conclusionary statements by declarant. *See generally In re Geisler*, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997); *In re Huang*, 100 F.3d 135, 140, 40 USPQ2d 1685, 1689-90 (Fed. Cir. 1996); *In re Merck*, 800 F.2d 1091, 1099, 231 USPQ 375, 381 (Fed. Cir. 1986); *In re Longi*, 759 F.2d 887, 897, 225 USPQ 645, 651-52 (Fed. Cir. 1985); *In re*

Klosak, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972); *In re Borkowski*, 505 F.2d 713, 718, 184 USPQ 29, 33 (CCPA 1974); *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972); *In re D'Ancicco*, 439 F.2d 1244, 1248, 169 USPQ 303, 306 (1971). There is no doubt that the reaction between the ogranometallic complex and the non-monomeric mononucleophilic compound in Wright solutions 1-3 in declaration Example A or the ogranometallic copolymer and the non-monomeric mononucleophilic compound in Wright solution 1 in declaration Example B forms the reaction product characterized by declarant McCormick as the "$CpMn(CO)_2$/N species" because the declaration Examples are no more than bare reproductions of the basic chemistry depicted in Wright (cols. 3, lines 52-62, and col. 4, lines 1-8, 11-25, and 28-50) but with no inter- or intra-crosslinking of a copolymer containing an energy sensitive organometallic group through a nucleophilic group present in the same or different polymer or in a polynucleophilic compound which is the point of Wright Embodiments I-III. There is objective evidence in the qualitative results reported for Wright solutions 1-3 in declaration Example A that chemical bonds *were* formed between the non-monomeric organometallic complex and the basic reactive site containing substrate, and thus *not* prevented, by the non-monomeric mononucleophilic compound at least at certain levels of irradiation consistent with the teachings of Wright. There is *no* objective evidence in the qualitative results reported for Wright solution 1 in declaration Example B that chemical bonds were not formed between the organometallic copolymer and the substrates, and thus prevented by the non-monomeric mononucleophilic compound, at the single level of irradiation reported, which level of irradiation is indeed below that in intensity and, in certain instances, the period taught in Wright. The conclusions drawn by declarant McCormick from the subjective descriptions of adhesion set forth in the Wright Examples add little, if any, substance to these showings.

We find that appellants and declarant McCormick have failed to establish by evidence or scientific explanation that such objective and subjective evidence can be extrapolated to provide even an indication of any actual difference between the articles of appealed claim 2, as we have construed this claim above, and the articles taught by the Wright Examples and Embodiments addressed in the McCormick declaration that would be probative with respect to whether the claimed and Wright articles are necessarily or inherently identical or substantially identical or whether the modifications of the

Wright Examples as taught by that reference would have been within the ordinary skill in this art. Indeed, we find that there are such significant differences in components between the declaration Examples stated to "model" or to be "representative" of the Wright Examples and the components and the extent of irradiation found in the Wright Examples that whatever evidence there may be of a patentable distinction between the claimed and Wright articles with respect to either § 102(b) or § 103 is obscured in a welter of unfixed variables. *Compare In re Heyna*, 360 F.2d 222, 228, 149 USPQ 692, 697 (CCPA 1966); *In re Dunn*, 349 F.2d 433, 439, 146 USPQ 479, 483-84 (CCPA 1965). We particularly find this to be the case with respect to Wright Example 18 which is stated by declarant McCormick to be the "*only* example that does not use an excess of nucleophile" and thus stands on a different factual footing from the other Wright Examples.

Accordingly, we affirm the ground of rejection of appealed claims 2 through 14, 16 and 18 through 21 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wright.

Under the provisions of 37 CFR § 1.196(b) (December 1997), we enter a new ground of rejection of appealed claims 24 and 25 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wright. We have compared these appealed claims, as we have construed claim 24 above, with Wright and, as we have discussed above, find that Wright discloses and exemplifies processes wherein a substrate having basic reactive sites is coated with an energy sensitive organometallic compound, having at least one organometallic group that is essentially free of nucleophilic groups, on at least one surface of the substrate and chemically bonding the energy sensitive organometallic compound to the basic reactive sites of the substrate by exposing the coating to energy, which processes are necessarily or inherently, identical or substantially identically to the processes encompassed by the appealed claims. Accordingly, because the processes of the appealed claims and the disclosed and exemplified processes of Wright appear to be necessarily or inherently, identical or substantially identical, the burden falls upon appellants to establish by effective argument and/or objective evidence that the claimed invention patentably distinguishes over this reference, whether the rejection is considered to be based on § 102(b) or § 103. *See, e.g.*, *Spada*, *supra*; *Best*, *supra*. We have carefully considered the arguments and evidence in the McCormick

declaration advanced by appellants with respect to the rejection of appealed claim 2 under § 102(b) or § 103 to the extent that they apply to this new ground of rejection. However, our findings and opinion with respect thereto expressed above, equally apply here. Accordingly, the burden of going forward as to this ground of rejection remains with appellants.

We now consider the two grounds of rejection of appealed claims 2 through 23 under 35 U.S.C. § 103 as being unpatentable over the combination of Wright and Palazzotto in the first ground of rejection and over this same combination of references further with Bailey in the second ground of rejection. In each of the two grounds of rejection we now consider, the examiner contends that it would have been obvious to modify the teachings of Wright by Palazzotto's teachings of "multiple polymeric species" and not the "organometallic salts" (answer, page 14), that is, it would have been obvious to "have used Palazzotto's organic constituents with Wright's invention" (answer, page 7; see also page 6). In the second ground considered here, the examiner adds Bailey for the teachings therein of "processes of bonding transition metal carbonyl compounds with different substrates" (answer, page 8). Thus, these grounds of rejection are intended to address the inventions encompassed by appealed claims 15, 22 and 23, all of which are dependent on appealed claim 2. Appealed claim 15 encompasses articles prepared from an organic polymer prepared by reacting a chloroformylcyclopolyenyl metal carbonyl complex with a hydroxy containing organic polymer in the presence of a base. Appealed claims 22 and 23 encompass abrasive articles prepared from abrasive particles and epoxy monomers (specification, e.g., pages 15-16 and 20-22). With this view of these grounds of rejection, we must agree with appellants (principal brief, pages 18-19; reply brief, page 8) that the examiner has not carried the burden of making out a *prima facie* case of obviousness. We fail to find in the record any evidence or scientific reasoning why one of ordinary skill in this art would have found the suggestion to modified the organometallic group and/or nucleophilic group containing copolymers of Wright Embodiments I-IV with the epoxy monomers and/or polyurethane precursors of Palazzotto with the reasonable expectation of forming an abrasive article. *See In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991), cited by appellants. We find no teaching in either combination of references which applies to appealed claim 15. Thus, we reverse these specific grounds of rejection of appealed claims 2 through 23, bearing in mind that we have already affirmed the ground of rejection of appealed claims 2

through 14, 16 and 18 through 21 as being anticipated under § 102(b) or obvious under § 103 over Wright.

We also reverse the ground of rejection of appealed claims 24 and 25 under 35 U.S.C. § 103 as being unpatentable over *Printed Circuits Handbook* further in view of Wright. The examiner contends that one of ordinary skill in the art of printed circuits would have used the "organometallic photoinitiator as disclosed by Wright" in the process of photopolymerization in the preparation of a printed circuit. Appellants submit that the examiner's rejection does not apply to appealed claims 24 and 25 which are not drawn to methods of preparing printed circuits (principal brief, page 19; reply brief, pages 8-9). We agree with the examiner that the articles prepared with the methods of appealed claims 24 and 25 do indeed comprise printed circuits. However, we again fail to find in the record any evidence or scientific reasoning why one of ordinary skill in this art would have found the suggestion in the combination of references to combine the organometallic coatings of Wright which are crosslinked via nucleophilic groups with copper substrates that are free of basic reactive sites in the processes disclosed in *Printed Circuits Handbook* (secs. 11.9.2-11.10) with the reasonable expectation of obtaining the claimed method. Thus, the examiner has not carried the burden of making out a *prima facie* case of obviousness. *Vaeck, supra*. Accordingly, we reverse this specific ground of rejection of appealed claims 24 and 25, bearing in mind that we have entered a new ground of rejection of appealed claims 24 and 25 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wright.

We finally consider the ground of rejection of appealed claims 2 under 35 U.S.C. § 102(b) as being anticipated by Bailey. We have carefully considered Bailey and based thereon find that we agree with the examiner (answer, pages 4-6 and 11-13) that appealed claim 2 is anticipated by "compound 51" of Bailey (page 140). Contrary to appellants' position (reply brief, page 7; see also principal brief, pages 14-16 and 17-18), "compound 51" is an article which is an organometallic dimer immobilized on an inorganic substrate that is formed by the reaction of the functionalized organometallic group with a polymeric substrate that has basic reactive sites (appellants' specification, page 19, lines 3-4) by exposure to thermal energy (Bailey, e.g., pages 139-40 and 138-39). Accordingly, we affirm this ground of rejection.

In summary, we have affirmed the ground of rejection of appealed claims 2 through 14, 16 and 18 through 21 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wright and the ground of rejection of appealed claims 2 under 35 U.S.C. § 102(b) as being anticipated by Bailey. We have reversed all of the remaining grounds of rejection maintained by the examiner on appeal. Under the provisions of 37 CFR § 1.196(b) (December 1997), we have entered a new ground of rejection of appealed claims 24 and 25 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wright.

The examiner's decision is affirmed-in-part.

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision . . . .

37 CFR § 1.196(b) also provides that the appellant, *WITHIN TWO MONTHS FROM THE DATE OF THE DECISION*, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should the appellant elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the

prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

37 CFR § 1.196(b)

JOHN D. SMITH Administrative Patent Judge	)	
CAMERON WEIFFENBACH Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
CHARLES F. WARREN Administrative Patent Judge	)	

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